PROJECT NAMEPROJECT NUMBER

Date

SPECIAL PROVISION

AMENDMENT TO SECTION 616 – TRAFFIC SIGNALS

<u>Item 616.101 – Traffic Signals</u>

This special provision provides for the construction of a new traffic signal system at the intersection of *STREET NAME* with *STREET NAME* in the *town or city* of *TOWN NAME*. The system will be coordinated with the following intersections:

- Intersection description
- Intersection description

GENERAL:

All provisions of Section 616, except as modified or changed below, shall apply.

- 1. The Contractor shall be responsible for signal operation and maintenance once alterations to the existing signals, excavation or other work within 75 feet of the stop bar at any leg of the intersection has begun. At this point in time the Contractor shall notify the Bureau of Traffic and furnish the Contract Administrator and the Transportation Management Center (TMC) (tel. 603-271-6862) or (for District 1 Projects only) Lancaster Radio Communications (tel. 603-788-4641) with names and phone numbers of persons to be contacted in case of a malfunction. The Contact person must be available 24 hours a day, seven days a week. The Contractor shall also keep a signal log in the cabinet to track all maintenance work they complete on the signal system. This log shall be placed within a plastic cover and shall at least include the description of the trouble call, corrective action taken, date, time, and personnel who completed the work.
- 2. The traffic signal must be inspected and approved by the Bureau of Traffic prior to placing in flash operation. The Contractor shall contact Subramanian Sharma at the Bureau of Traffic at (603) 271-2291 one week prior to turning the signals on flash. If the Contractor does not speak directly with Subramanian Sharma they must leave a detailed message with the Administrative Assistant and expect a call back. Leaving a message does not constitute an approval.

- 3. The Contractor shall be responsible for the dismantling and removing of the existing signal heads, mast arms and poles, foundations, existing electrical service, and controller cabinet. All surplus equipment shall be salvaged and delivered to the Department of Transportation, Bureau of Traffic in Concord, within normal business hours.
- 4. The initial power hook-up and operational costs will be paid for by the Contractor during the construction contract. Once the traffic signals are completed and accepted through the final inspection process, the monthly billing for the power costs for operating the traffic signal shall be paid for by *the State of NH Developer* (name) or Municipality at the following address: State of NH, NHDOT Bureau of Traffic, Signal ###-##, PO Box 483, Concord, NH 03302-0483. The Contractor shall contact Subramanian Sharma at the Bureau of Traffic (603-271-2291) to determine the signal identification number (Signal ###-##).
- 5. The initial telephone hookup will be paid for by the Contractor. The monthly billing for the telephone shall be sent to the following address: State of NH, NHDOT TMC, Signal ###-##, PO Box 483, Concord, NH 03302-0483. The Contractor shall contact Subramanian Sharma at the Bureau of Traffic (603-271-2291) to determine the signal identification number (Signal ###-##).
- 6. All interconnect cable shall be labeled and terminated on a terminal panel protected with EDCO PCD642-008D surge suppressers.
- 7. All system detectors shall be terminated on a separate panel from the main detector panel.

Add to 2.1:

2.1.3 List of Major Materials:

- X 8-phase programmable traffic actuated signal controller of current NEMA specifications with internal time base coordination and internal fire pre-emption. Overlaps shall be internally generated as per NEMA Standard TS-1 using wire jumpers on a printed circuit board. Econolite Corp., Model ASC/2-2100, PEEK Traffic Inc., Model 3000, Naztec Series 900 Controller, or approved equal. Equipment to be housed in a P Type cabinet assembled by the equipment manufacture which will include telemetry harness and panel and 12-inch extension base. The exterior of the Controller Cabinet shall be natural aluminum finish.
- X Closed loop system master compatible with the proposed controller and telephone drop to complete communications to NHDOT Bureau of Traffic in Concord, NH.

- X 30 Amp 125 V semi-flush Traffic Signal Generator Transfer switch with confirmation pilot light to indicate restored power mounted to the controller cabinet. GenTran Corp or approved equal.
- X Spare power supply unit or BIU for rack mount detectors (NOT REQUIRED)
- X On-Street Modem, US Robotics 56 KB or approved equal.
- X Quadrupole roadway loop detectors, 6.0 ft x 50.0 ft, with 2-4-2 turns as per plan.
- X Rectangular roadway loop detectors, 3 turns 6.0 ft x 6.0 ft as per plan.
- X Dual Channel, rack mounted loop detector amplifiers, self-tuning, Canoga / 3M Model C422T, Naztec, Inc. Model 722 TXC, or Peek / Sarasota Model 222T GP6 or an approved equal.
- X One-way, three-section, 12-inch aluminum signal heads with LED modules type, DIOLUXTM brand or approved equal, mounted on mast arms with Pelco Astro-Bracs, with 5-inch louvered backplate.
- X One-way, three-section, 12-inch bracket mounted aluminum signal heads with LED modules type, DIOLUXTM brand or approved equal, with 5-inch louvered backplate.
- X- One-way, four-section, 12-inch aluminum signal heads with LED modules type DIOLUXTM or approved equal, mounted on mast arms with Pelco Astro-Bracs, with 5-inch louvered backplate.
- X One-way, four-section, 12-inch bracket mounted aluminum signal heads with LED modules type, DIOLUXTM brand or approved equal and 5-inch louvered backplate.
- X LED green ball lamps.
- X Meter pedestal with 30 amps disconnect switch, P & K Model CP 314 or approved equal.
- X Galvanized steel mast arm poles, the signal arm shall be XX ft. Mast arm poles shall be manufactured by Valmont Industries, Inc., or Union Metal Corp., or approved equal.
- X Galvanized steel mast arm poles with street light luminaires arm at a 40 ft mounting height. The signal arms shall be XX ft. Mast arm poles shall be manufactured by Valmont Industries, Inc., or Union Metal Corp., or approved equal.
- X 8 ft P & K signal pole, model SP 104 or approved equal.
- X 10 ft P & K signal pole, model SP 114 or approved equal.

- X Bracket mounted, 12-inch/16-inch, LED pedestrian signal heads with solid hand symbol and solid walking man symbol with countdown timer display.
- X Pedestal mounted, 12-inch/16-inch, LED pedestrian signal heads with solid hand symbol and solid walking symbol with countdown timer display.
- X Pedestrian push buttons, Pelco model SE-2109-08 or approved equal.
- X R10-3e (with left and/or right walking directional arrow), 9 inch by 15 inch, Count-Down Pedestrian Sign.
- X Optical Fire Preempter Phase Selector, Opticom Model 754, with a Model 760 Card Rack, or approved equal.
- X Optical Fire Preempter receivers Opticom Model 711 or approved equal.
- X Confirmation strobe light, 120 VAC, with red Lexan optic lens. Whelen Model, IAC 12 RP or approved equal.
- X Electric service complete.
- X R10-12, 24 inch by 30 inch, "Left Turn Yield on Green" (Green Ball).
- X R10-11a(M), 24 inch by 30 inch, "No Turn On Red Arrow".
- X Designated as sign "D-3a", 96 inch by 30 inch, Type BB aluminum sign "SIGN TEXT" mast arm mounted. The center of the street sign shall be mounted on the mast arm half the sign width distance plus two (2) feet from the signal pole.
- X Designated as sign "D-3b", 96 inch by 16 inch, Type BB aluminum sign "SIGN TEXT" mast arm mounted. The center of the street sign shall be mounted on the mast arm one half the sign width distance plus two (2) feet from the signal pole.